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21. (amended) An electromedical apparatus for data transmission comprising:

an electromedical implant having a first transmitter/receiver unit; and

an associated external apparatus having a second transmitter/receiver unit;

the first transmitter/receiver unit beginning data transmission by sending a triggering signal to the second transmitter/receiver unit in a first time interval, and

at least a reception readiness of the first transmitter/receiver unit being maintained after emission of the triggering signal for a second time interval.

22. (amended) The apparatus as set forth in claim 21, wherein at least a receiving portion of the first transmitter/receiver unit remains switched off after termination of the second time interval during a rest phase which extends up to a next triggering signal.

REMARKS

The above identified patent application has been amended and reconsideration and reexamination are hereby requested.

Claims 1 - 22 are now in the application. Claims 1 - 22 have been amended.

The Examiner has objected to the Drawings as not having rectangular boxes labeled as described in the specification. The Applicants have accordingly provided new Figs. 1 - 10 marked in red to show changes made. Appropriate corrected formal drawings will be provided upon receipt of a Notice of Allowance.

The Examiner has objected to the the specification because it lacks section headings. The Applicants have accordingly amended the specification to insert section headings. In addition the

specification has been amended to correct a discovered grammatical/typographical error.

The Examiner has objected to the claims for various informalities, including superfluous reference numerals. The Applicant have accordingly amended the claims to correct the informalities.

The Examiner has rejected Claims 1 - 22 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

The Applicants have amended Claims 1 - 22 to include transitional phrases and correct indefinite terminology and lack of antecedent basis. The Applicants submit that Claims 1 - 22 particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

The Examiner has rejected Claims 1, 2, 4, 6 - 17, 19 21 and 22 under 35 U.S.C. §102(b) as being anticipated by de Coriolis (EPO 0607638). The Examiner has also rejected under 35 U.S.C. §103 Claims 3 and 18 as being unpatentable over de Coriolis in view of Wyborny (US 5,354,319) and Claims 5 and 20 as being unpatentable over de Coriolis in view of Fountain et al. (US 4,625,730).

Applicants' amended Claim 1 calls for (underlining added for emphasis) ... A method of data transmission between an electromedical implant having a first transmitter/receiver unit and an associated external apparatus having a second transmitter/receiver unit, comprising: beginning data transmission with a triggering signal sent by the first transmitter/receiver unit to the second transmitter/receiver unit in a first time interval; and maintaining a reception readiness of the first transmitter/receiver unit after emission of the triggering signal for a second time interval.

As such, Applicants submit that Claim 1 is not anticipated by de Coriolis under 35 U.S.C. §102(b).

The present invention provides for the triggering signal to be emitted by the transmitter/receiver unit of the implant. No semi-awake state (partially active state) of the implant is required. This is achieved because every data exchange between the implant and an external device is initiated by the implant itself. The implant, in accordance with the present invention sends an initial signal to the external device and waits for an answer for predetermined period of time. If the implant does not receive any answer within that time window, the implant will fall back in a switched off state for the... transmitter/receiver unit thereby avoiding any energy consumption by the transmitter/receiver unit.

De Coriolis et al., on the other hand, teaches that the initiation command shall be transmitted by the external programmer to the implant (see column 11, lines 1 to 4). This is exactly the opposite of what is claimed in accordance with the present invention. Further, the device according to de Coriolis et al. needs to keep the transmitter/receiver unit of the implant in a partially active state to be able to receive the initiation command which is sent by the external programmer.

Accordingly, the Applicants submit that Claim 1 is not anticipated by de Coriolis under 35 U.S.C. §102(b).

Claims 2 - 20 are dependent on Claim 1. As such, these claims are believed allowable based upon Claim 1.

The Applicants' amended Claim 21 calls for (underlining added for emphasis) ... An electromedical apparatus for data transmission comprising: an electromedical implant having a first transmitter/receiver unit; and an associated external apparatus having a second transmitter/receiver unit; the first transmitter/receiver unit beginning data transmission by sending a triggering signal to the second transmitter/receiver unit in a first time interval, and

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at least a reception readiness of the first transmitter/receiver unit being maintained after emission of the triggering signal for a second time interval.

The Applicants submit that Claim 21 is not anticipated by de Coriolis under 35 U.S.C. §102(b) for the same reasons set forth above for Claim 1.

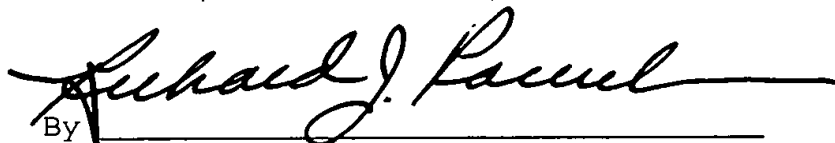
Claim 22 is dependent on Claim 21. As such, Claim 22 is believed allowable based upon Claim 21.

Accordingly, in view of the above amendment and remarks it is submitted that the claims are patentably distinct over the prior art and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above Application is requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP .

By 
Richard J. Paciulan
Reg. No. 28,248
626/795-9900

RJP/cah

VERSION WITH MARKINGS TO SHOW CHANGES MADE

(Underlinings indicate insertions. Brackets indicate deletions)

In the Specification:

The following paragraph has been amended as follows:

On Page 3, lines 16 - 17,:

In particular [particularly] simple variants the triggering signal is formed by or contains a first data set to be transmitted.

In the Claims:

Claims 1 - 22 have been amended as follows:

1.(amended) A method of data transmission between an electromedical implant [(1)] having a first transmitter/receiver unit[, in particular an implant for cardiological uses,] and an associated external apparatus [(2)] having a second transmitter/receiver unit [(6) in which], comprising:

beginning data transmission [begins] with a triggering signal [which is] sent by the first [one] transmitter/receiver unit to the second [other] transmitter/receiver unit [and which in normal operation of the implant (1) is sent] in [predeterminable] a first time interval; and [intervals characterized in that the triggering signal is always emitted by the first transmitter/receiver unit, wherein at least the]

maintaining a reception readiness of the first transmitter/receiver unit [is maintained] after emission of the triggering signal for a second time interval.

2.(amended) The [A] method as set forth in claim 1, further comprising [characterized in that at least the] switching off a receiving portion of the first transmitter/receiver unit [is switched

off] after termination of the second time interval during a rest phase which extends until a [the] next triggering signal.

3.(amended) The [A] method as set forth in claim 1 or claim 2, wherein [characterized in that] the second time interval is shorter than the first time interval.

4.(twice amended) The [A] method as set forth in Claim 1, wherein [characterized in that] the triggering signal [is formed by or] includes a first data set [which is] to be transmitted.

5.(twice amended) The [A] method as set forth in Claim 1, further comprising [characterized in that] manually causing an emission of the triggering signal [is caused manually, in particular] by a [the] wearer of the implant.

6.(twice amended) The [A] method as set forth in Claim 1, further comprising, [characterized in that] in response to a transmission of data by the first transmitter/receiver unit, the second transmitter/receiver unit sending [(6) sends] a first acknowledgment to the first transmitter/receiver unit, [wherein] the first acknowledgment including [includes] at least one first item of control information for controlling the reception readiness of the first transmitter/receiver unit.

7.(amended) The [A] method as set forth in claim 6, wherein [characterized in that] the first acknowledgment [is formed by or] includes a second data set [which is] to be transmitted.

8.(twice amended) The [A] method as set forth in Claim 1, further comprising [characterized in that] implementing by the external apparatus [(2) implements] a first plausibility check in

respect of [the] data transmitted by the first transmitter/receiver unit and in dependence on the plausibility of the data transmitted [data] the first acknowledgment including [includes] a second item of control information for control of the first transmitter/receiver unit, wherein in the event of lack of plausibility of the data transmitted [data] the second item of control information includes a first control signal for triggering a renewed transmission of data by the first transmitter/receiver unit.

9.(amended) The [A] method as set forth in claim 8, further comprising, [characterized in that] the first transmitter/receiver unit in response to the first control signal implementing [implements] a renewed transmission of data only if a number of renewed transmissions, which is sufficiently low to avoid overloading of a [the] power supply of the implant [(1)] is not exceeded.

10.(amended) The [A] method as set forth in claim 8 or claim 9, further comprising [characterized in that] for checking [the] transmission of [the] data by the implant [(1)] in the case of plausibility of the data transmitted [data] the second transmitter/receiver unit sending [(6) sends] at least a part of the data transmitted [data] to the first transmitter/receiver unit.

11.(amended) The [A] method as set forth in claim 10, further comprising [characterized in that] after checking [of the] transmission of the data by way of the first transmitter/receiver unit the implant sending [(1) sends] a second acknowledgment to the second transmitter/receiver unit [(2)], wherein when successful transmission of the data is established the second acknowledgment includes a first signature representing validity of [the] transmission and the implant closing [(1) closes] down at least the reception readiness of the first transmitter/receiver unit.

12.(amended) The [A] method as set forth in claim 11, further comprising [characterized in that] the external apparatus implementing [(2) implements] a second plausibility check in respect of the second acknowledgment and when lack of plausibility of the second acknowledgment is established after expiry of a further time interval after dispatch of the second acknowledgment implementing [implements] an interrogation of the implant [(1)], and [wherein] after the expiry of the further time interval the implant assuming [(1) assumes] reception and transmission readiness of the first transmitter/receiver unit for a renewed further time interval which is sufficient to receive and answer an inquiry from the external apparatus [(2)], and effecting an [wherein the] answer to the inquiry [is effected] by renewed sending of the second acknowledgment and/or the data which were sent last.

13.(twice amended) The [A] method as set forth in Claim 1, further comprising [characterized in that] when defective transmission of data is established, effecting a renewed transmission of data [is effected] by the first transmitter/receiver unit if a number of renewed transmissions, which is sufficiently low to avoid overloading of an [the] energy supply of the implant [(1)], is not exceeded.

14.(twice amended) The [A] method as set forth in Claim 1, further comprising [characterized in that] effecting renewed transmission [is effected] after expiry of a waiting time interval, wherein in the case of multiple renewed transmission the length of the waiting time interval [preferably] increases.

15.(twice amended) The [A] method as set forth in Claim 1, further comprising [characterized in that] after renewed transmission of data by the first transmitter/receiver unit executing again the method steps [are executed again] beginning with a [the] plausibility check.

16.(twice amended) The [A] method as set forth in Claim 1, wherein [characterized in that] the second transmitter/receiver unit [(6)] is substantially permanently ready to receive in an [the] initial condition up to a [the] first data exchange with the implant [(1)] and at least during the first data exchange reduces the transmission or reception readiness of the second transmitter/receiver unit [(6)] to a periodic transmission or reception readiness interval, wherein the second transmitter/receiver unit [(6)] is synchronized with the first transmitter/receiver unit in such a way that the transmission or reception readiness intervals of the first transmitter/receiver unit and second transmitter/receiver unit [units] overlap.

17.(amended) The [A] method as set forth in claim 16, further comprising [characterized in that in the event of] upon nonreceipt of transmissions of the first transmitter/receiver unit at the second transmitter/receiver unit [(6)] over a predetermined number of transmission or reception readiness intervals of the second transmitter/receiver unit [(6) the] prolonging transmission or reception readiness interval of the second transmitter/receiver unit [(6) is prolonged] to catch a divergence drift of synchronicity.

18.(twice amended) The [A] method as set forth in Claim 1, wherein [characterized in that] at least the first time interval is variable during operation by sending a second item of control information by the second transmitter/receiver unit [(6)] to the first transmitter/receiver unit which is ready to receive.

19.(twice amended) The [A] method as set forth in Claim 1, wherein [characterized in that] the first time interval is varied in dependence on [the] operating parameters of the implant [(1)].

20. (twice amended) The [A] method as set forth in Claim 1, further comprising [characterized in that] when appropriate operating parameters of the implant [(1)] apply, the first transmitter/receiver unit emits an emergency triggering signal to the second transmitter/receiver unit [(6)] for triggering an alarm signal.

21. (amended) An electromedical apparatus for data transmission comprising:

[between]--

an electromedical implant [(1)] having a first transmitter/receiver unit;[, in particular an implant for cardiological uses,] and

an associated external apparatus [(2)] having a second transmitter/receiver unit; [(6), in which]

the first transmitter/receiver unit beginning data transmission by sending [begins with] a triggering signal [which is sent by the one transmitter/receiver unit] to the second [other] transmitter/receiver unit [in normal operation of the implant (1)] in a [predeterminable] first time interval [intervals, characterized in that the triggering signal is always emitted by the first transmitter/receiver unit], and [wherein]

at least a [the] reception readiness of the first transmitter/receiver unit being [is] maintained after emission of the triggering signal for a second time interval.

22. (amended) The apparatus [Apparatus] as set forth in claim 21, wherein [characterized in that] at least a [the] receiving portion of the first transmitter/receiver unit remains switched off after termination of the second time interval during a rest phase which extends up to a [the] next triggering signal.